A COLDER WAR

Charles Stross

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The Year's Best Science Fiction - 2010

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Here's another brilliant story by Charles Stross, whose story “Antibodies” appears elsewhere in this anthology. In this one, he gives us a scary look at the proposition that, even in wartime, new allies may sometimes cost you more than they're worth ... more, in fact, than you have to spend ...

* * * *

Analyst

Roger Jourgensen tilts back in his chair, reading.

He's a fair-haired man, in his mid-thirties: hair razor-cropped, skin pallid from too much time spent under artificial lights. Spectacles, short-sleeved white shirt and tie, photographic ID badge on a chain round his neck. He works in an air-conditioned office with no windows.

The file he is reading frightens him.

Once, when Roger was a young boy, his father took him to an open day at Nellis AFB, out in the California desert. Sunlight glared brilliantly from the polished silverplate flanks of the big bombers, sitting in their concrete-lined dispersal bays behind barriers and blinking radiation monitors. The brightly coloured streamers flying from their pitot tubes lent them a strange, almost festive appearance. But they were sleeping nightmares: once awakened, nobody — except the flight crew — could come within a mile of the nuclear-powered bombers and live.

Looking at the gleaming, bulging pods slung under their wingtip pylons, Roger had a premature inkling of the fires that waited within, a frigid terror that echoed the siren wail of the air raid warnings. He'd sucked nervously on his ice cream and gripped his father's hand tightly while the band ripped through a cheerful Sousa march, and only forgot his fear when a flock of Thunderchiefs sliced by overhead and rattled the car windows for miles around.

He has the same feeling now, as an adult reading this intelligence assessment, that he had as a child, watching the nuclear powered bombers sleeping in their concrete beds.

There's a blurry photograph of a concrete box inside the file, snapped from above by a high-flying U-2 during the autumn of '61. Three coffin-

shaped lakes, bulking dark and gloomy beneath the arctic sun; a canal heading west, deep in the Soviet heartland, surrounded by warning trefoils and armed guards. Deep waters saturated with calcium salts, concrete coffer-dams lined with gold and lead. A sleeping giant pointed at NATO, more terrifying than any nuclear weapon.

Project Koschei.

* * * *

Red Square Redux

Warning

The following briefing film is classified SECRET GOLD JULY BOOJUM. If you do not have SECRET GOLD JULY BOOJUM clearance, leave the auditorium now and report to your unit security officer for debriefing. Failing to observe this notice is an imprisonable offense.

You have sixty seconds to comply.

Video clip

Red Square in springtime. The sky overhead is clear and blue; there's a little wispy cirrus at high altitude. It forms a brilliant backdrop for flight after flight of five four-engined bombers that thunder across the horizon and drop behind the Kremlin's high walls.

Voice-over

Red Square, the May Day parade, 1962. This is the first time that the Soviet Union has publicly displayed weapons classified GOLD JULY BOOJUM. Here they are:

Video clip

Later in the same day. A seemingly endless stream of armour and soldiers marches across the square, turning the air grey with diesel fumes. The trucks roll in line eight abreast, with soldiers sitting erect in the back. Behind them rumble a battalion of T-56's, their commanders standing at attention in their cupolas, saluting the stand. Jets race low and loud overhead, formations of MiG-17 fighters.

Behind the tanks sprawl a formation of four low-loaders: huge tractors towing low-sling trailers, their load beds strapped down under olive-drab tarpaulins. Whatever is under them is uneven, a bit like a loaf of bread the size of a small house. The trucks have an escort of jeep-like vehicles on each side, armed soldiers sitting at attention in their backs.

There are big five-pointed stars painted in silver on each tarpaulin, like outlines of stars. Each star is surrounded by a stylized silver circle; a unit

insignia, perhaps, but not in the standard format for Red Army units. There's lettering around the circles, in a strangely stylised script.

Voice-over

These are live servitors under transient control. The vehicles towing them bear the insignia of the second Guards Engineering Brigade, a penal construction unit based in Bokhara and used for structural engineering assignments relating to nuclear installations in the Ukraine and Azerbaijan. This is the first time that any Dresden Agreement party openly demonstrated ownership of this technology: in this instance, the conclusion we are intended to draw is that the sixty-seventh Guard Engineering Brigade operates four units. Given existing figures for the Soviet ORBAT we can then extrapolate a total task strength of two hundred and eighty eight servitors, if this unit is unexceptional.

Video clip

Five huge Tu-95 Bear bombers thunder across the Moscow skies.

Voice-over

This conclusion is questionable. For example, in 1964 a total of two hundred and forty Bear bomber passes were made over the reviewing stand in front of the Lenin mausoleum. However, at that time technical reconnaissance assets verified that the Soviet air force has hard stand parking for only one hundred and sixty of these aircraft, and estimates of airframe production based on photographs of the extent of the Tupolev bureau's works indicate that total production to that date was between sixty and one hundred and eighty bombers.

Further analysis of photographic evidence from the 1964 parade suggests that a single group of twenty aircraft in four formations of five made repeated passes through the same airspace, the main arc of their circuit lying outside visual observation range of Moscow. This gave rise to the erroneous capacity report of 1964 in which the first strike delivery capability of the Soviet Union was over-estimated by as much as three hundred percent.

We must therefore take anything that they show us in Red Square with a pinch of salt when preparing force estimates. Quite possibly these four servitors are all they've got. Then again, the actual battalion strength may be considerably higher.

Still photographic sequence

From very high altitude — possibly in orbit — an eagle's eye view of a remote village in mountainous country. Small huts huddle together beneath a craggy outcrop; goats graze nearby.

In the second photograph, something has rolled through the village leaving a trail of devastation. The path is quite unlike the trail of damage left by an artillery bombardment: something roughly four metres wide has shaved the rocky plateau smooth, wearing it down as if with a terrible heat. A corner of a shack leans drunkenly, the other half sliced away cleanly. White bones gleam faintly in the track; no vultures descend to stab at the remains.

Voice-over

These images were taken very recently, on successive orbital passes of a KH-11 satellite. They were timed precisely eighty-nine minutes apart. This village was the home of a noted Mujahedin leader. Note the similar footprint to the payloads on the load beds of the trucks seen at the 1962 parade.

These indicators were present, denoting the presence of servitor units in use by Soviet forces in Afghanistan: the four metre wide gauge of the assimilation track. The total molecular breakdown of organic matter in the track. The speed of destruction — the event took less than five thousand seconds to completion, no survivors were visible, and the causative agent had already been uplifted by the time of the second orbital pass. This, despite the residents of the community being armed with DShK heavy machine guns, rocket propelled grenade launchers, and AK-47's. Lastly: there is no sign of the causative agent even deviating from its course, but the entire area is depopulated. Except for excarnated residue there is no sign of human habitation.

In the presence of such unique indicators, we have no alternative but to conclude that the Soviet Union has violated the Dresden Agreement by deploying GOLD JULY BOOJUM in a combat mode in the Khyber pass. There are no grounds to believe that a NATO armoured division would have fared any better than these mujahedin without nuclear support ...

* * * *

Puzzle Palace

Roger isn't a soldier. He's not much of a patriot, either: he signed up with the CIA after college, in the aftermath of the Church Commission hearings in the early seventies. The Company was out of the assassination

business, just a bureaucratic engine rolling out National Security assessments: that's fine by Roger. Only now, five years later, he's no longer able to roll along, casually disengaged, like a car in neutral bowling down a shallow incline towards his retirement, pension and a gold watch. He puts the file down on his desk and, with a shaking hand, pulls an illicit cigarette from the pack he keeps in his drawer. He lights it and leans back for a moment to draw breath, force relaxation, staring at smoke rolling in the air beneath the merciless light until his hand stops shaking.

Most people think spies are afraid of guns, or KGB guards, or barbed wire, but in point of fact the most dangerous thing they face is paper. Papers carry secrets. Papers can carry death warrants. Papers like this one, this folio with its blurry eighteen year old faked missile photographs and estimates of time/survivor curves and pervasive psychosis ratios, can give you nightmares, dragging you awake screaming in the middle of the night. It's one of a series of highly classified pieces of paper that he is summarizing for the eyes of the National Security Council and the President Elect — if his head of department and the DDCIA approve it — and here he is, having to calm his nerves with a cigarette before he turns the next page.

After a few minutes, Roger's hand is still. He leaves his cigarette in the eagle-headed ash tray and picks up the intelligence report again. It's a summary, itself the distillation of thousands of pages and hundreds of photographs. It's barely twenty pages long: as of 1963, its date of preparation, the CIA knew very little about Project Koschei. Just the bare skeleton, and rumours from a highly-placed spy. And their own equivalent project, of course. Lacking the Soviet lead in that particular field, the USAF fielded the silver-plated white elephants of the NB-39 project: twelve atomic-powered bombers armed with XK-PLUTO, ready to tackle Project Koschei should the Soviets show signs of unsealing the bunker. Three hundred megatons of H-bombs pointed at a single target, and nobody was certain it would be enough to do the job.

And then there was the hard-to-conceal fiasco in Antarctica. Egg on face: a subterranean nuclear test program in international territory! If nothing else, it had been enough to stop JFK running for a second term. The test program was a bad excuse: but it was far better than confessing what had really happened to the 501st Airborne Division on the cold plateau beyond Mount Erebus. The plateau that the public didn't know about, that didn't show up on the maps issued by the geological survey departments of

those governments party to the Dresden Agreement of 1931 — an arrangement that even Hitler had stuck to. The plateau that had swallowed more U-2 spy planes than the Soviet Union, more surface expeditions than darkest Africa.

Shit. How the hell am I going to put this together for him?

Roger's spent the past five hours staring at this twenty page report, trying to think of a way of summarizing their drily quantifiable terror in words that will give the reader power over them, the power to think the unthinkable: but it's proving difficult. The new man in the White House is straight-talking, demands straight answers. He's pious enough not to believe in the supernatural, confident enough that just listening to one of his speeches is an uplifting experience if you can close your eyes and believe in morning in America. There is probably no way of explaining Project Koschei, or XK-PLUTO, or MK-NIGHTMARE, or the gates, without watering them down into just another weapons system — which they are not. Weapons may have deadly or hideous effects, but they acquire moral character from the actions of those who use them. Whereas these projects are indelibly stained by a patina of ancient evil ...

He hopes that if the balloon ever does go up, if the sirens wail, he and Andrea and Jason will be left behind to face the nuclear fire. It'll be a merciful death compared with what he suspect lurks out there, in the unexplored vastness beyond the gates. The vastness that made Nixon cancel the manned space program, leaving just the standing joke of a white-elephant shuttle, when he realised just how hideously dangerous the space race might become. The darkness that broke Jimmy Carter's faith and turned Lyndon B. Johnson into an alcoholic.

He stands up, nervously shifts from one foot to the other. Looks round at the walls of his cubicle. For a moment the cigarette smouldering on the edge of his ash tray catches his attention: wisps of blue-grey smoke coil like lazy dragons in the air above it, writhing in a strange cuneiform text. He blinks and they're gone, and the skin in the small of his back prickles as if someone had pissed on his grave.

"Shit." Finally, a spoken word in the silence. His hand is shaking as he stubs the cigarette out. Mustn't let this get to me. He glances at the wall. It's nineteen hundred hours; too late, too late. He should go home, Andy will be worrying herself sick.

In the end it's all too much. He slides the thin folder into the safe behind his chair, turns the locking handle and spins the dial, then signs himself out of the reading room and goes through the usual exit search.

During the thirty mile drive home, he spits out of the window, trying to rid his mouth of the taste of Auschwitz ashes.

* * * *

Late Night in the White House

The colonel is febrile, jittering about the room with gung-ho enthusiasm. “That was a mighty fine report you pulled together, Jourgensen!" He paces over to the niche between the office filing cabinet and the wall, turns on the spot, paces back to the far side of his desk. ”You understand the fundamentals. I like that. A few more guys like you running the company and we wouldn't have this fuckup in Tehran." He grins, contagiously. The colonel is a firestorm of enthusiasm, burning out of control like a forties comic-book hero. He has Roger on the edge of his chair, almost sitting at attention. Roger has to bite his tongue to remind himself not to call the colonel 'sir' — he's a civilian, not in the chain of command. "That's why I've asked Deputy Director McMurdo to reassign you to this office, to work on my team as company liaison. And I'm pleased to say that he's agreed."

Roger can't stop himself: “To work here, sir?" Here is in the basement of the Executive Office Building, an extension hanging off the White House. Whoever the colonel is he's got pull, in positively magical quantities. ”What will I be doing, sir? You said, your team —"

“Relax a bit. Drink your coffee." The colonel paces back behind his desk, sits down. Roger sips cautiously at the brown sludge in the mug with the Marine Corps crest. ”The president told me to organize a team," says the colonel, so casually that Roger nearly chokes on his coffee, “to handle contingencies. October surprises. Those asshole commies down in Nicaragua. 'We're eyeball to eyeball with an Evil Empire, Ozzie, and we can't afford to blink' — those were his exact words. The Evil Empire uses dirty tricks. But nowadays we're better than they are: buncha hicks, like some third-world dictatorship — Upper Volta with shoggoths. My job is to pin them down and cut them up. Don't give them a chance to whack the shoe on the UN table, demand concessions. If they want to bluff I'll call 'em on it. If they want to go toe-to-toe I'll dance with 'em." He's up and pacing again. ”The company used to do that, and do it okay, back in the fifties and

sixties. But too many bleeding hearts — it makes me sick. If you guys went back to wet ops today you'd have journalists following you every time you went to the john in case it was newsworthy.

“Well, we aren't going to do it that way this time. It's a small team and the buck stops here." The colonel pauses, then glances at the ceiling. ”Well, maybe up there. But you get the picture. I need someone who knows the company, an insider who has clearance up the wazoo who can go in and get the dope before it goes through a fucking committee of ass-watching bureaucrats. I'm also getting someone from the Puzzle Palace, and some words to give me pull with Big Black." He glances at Roger sharply, and Roger nods: he's cleared for National Security Agency — Puzzle Palace — intelligence, and knows about Big Black, the National Reconnaissance Office, which is so secret that even its existence is still classified.

Roger is impressed by this colonel, despite his better judgement. Within the byzantine world of the US intelligence services, he is talking about building his very own pocket battleship and sailing it under the jolly roger with letters of marque and reprise signed by the president. But Roger still has some questions to ask, to scope out the limits of what Colonel North is capable of. "What about FEVER DREAM, sir?"

The colonel puts his coffee-cup down. “I own it," he says, bluntly. ”And NIGHTMARE. And PLUTO. Any means necessary he said, and I have an executive order with the ink still damp to prove it. Those projects aren't part of the national command structure any more. Officially they've been stood down from active status and are being considered for inclusion in the next round of arms reduction talks. They're not part of the deterrent ORBAT any more; we're standardizing on just nuclear weapons. Unofficially, they're part of my group, and I will use them as necessary to contain and reduce the Evil Empire's warmaking abilities."

Roger's skin crawls with an echo of that childhood terror. "And the Dresden Agreement ...?"

“Don't worry. Nothing short of them breaking it would lead me to do so." The colonel grins, toothily. ”Which is where you come in ..."

* * * *

The moonlit shores of Lake Vostok

The metal pier is dry and cold, the temperature hovering close to zero degrees Fahrenheit. It's oppressively dark in the cavern under the ice, and Roger shivers inside his multiple layers of insulation, shifts from foot to

foot to keep warm. He has to swallow to keep his ears clear and he feels slightly dizzy from the pressure in the artificial bubble of air, pumped under the icy ceiling to allow humans to exist here, under the Ross Ice Shelf; they'll all spend more than a day sitting in depressurization chambers on the way back up to the surface.

There is no sound from the waters lapping just below the edge of the pier. The floodlights vanish into the surface and keep going — the water in the sub-surface Antarctic lake is incredibly clear — but are swallowed up rapidly, giving an impression of infinite, inky depths.

Roger is here as the colonel's representative, to observe the arrival of the probe, receive the consignment they're carrying, and report back that everything is running smoothly. The others try to ignore him, jittery at the presence of the man from DC. There're a gaggle of engineers and artificers, flown out via McMurdo base to handle the midget sub's operations. A nervous lieutenant supervises a squad of marines with complicated-looking weapons, half gun and half video camera, stationed at the corners of the raft. And there's the usual platform crew, deep-sea rig maintenance types — but subdued and nervous looking. They're afloat in a bubble of pressurized air wedged against the underside of the Antarctic ice sheet: below them stretch the still, supercooled waters of Lake Vostok.

They're waiting for a rendezvous.

“Five hundred yards," reports one of the techs. ”Rising on ten." His companion nods. They're waiting for the men in the midget sub drilling quietly through three miles of frigid water, intruders in a long-drowned tomb. "Have 'em back on board in no time." The sub has been away for nearly a day; it set out with enough battery juice for the journey, and enough air to keep the crew breathing for a long time if there's a system failure, but they've learned the hard way that fail-safe systems aren't. Not out here, at the edge of the human world.

Roger shuffles some more. "I was afraid the battery load on that cell you replaced would trip an undervoltage isolator and we'd be here 'til Hell freezes over," the sub driver jokes to his neighbour.

Looking round, Roger sees one of the marines cross himself. "Have you heard anything from Gorman or Suslowicz?" he asks quietly.

The lieutenant checks his clipboard. “Not since departure, sir," he says. ”We don't have comms with the sub while it's submerged: too small for ELF, and we don't want to alert anybody who might be, uh, listening."

"Indeed." The yellow hunchback shape of the midget submarine appears at the edge of the radiance shed by the floodlights. Surface waters undulate, oily, as the sub rises.

"Crew transfer vehicle sighted," the driver mutters into his mike. He's suddenly very busy adjusting trim settings, blowing bottled air into ballast tanks, discussing ullage levels and blade count with his number two. The crane crew are busy too, running their long boom out over the lake.

The sub's hatch is visible now, bobbing along the top of the water: the lieutenant is suddenly active. “Jones! Civatti! Stake it out, left and centre!" The crane is already swinging the huge lifting hook over the sub, waiting to bring it aboard. ”I want eyeballs on the portholes before you crack this thing!" It's the tenth run — seventh manned — through the eye of the needle on the lake bed, the drowned structure so like an ancient temple, and Roger has a bad feeling about it. We can't get away with this forever, he reasons. Sooner or later ...

The sub comes out of the water like a gigantic yellow bath toy, a cyborg whale designed by a god with a sense of humour. It takes tense minutes to winch it in and manoeuvre it safely onto the platform. Marines take up position, shining torches in through two of the portholes that bulge myopically from the smooth curve of the sub's nose. Up on top someone is talking into a handset plugged into the stubby conning tower; the hatch locking wheel begins to turn.

"Gorman, sir," It's the lieutenant. In the light of the sodium floods everything looks sallow and washed-out; the soldier's face is the colour of damp cardboard, slack with relief.

Roger waits while the submariner — Gorman — clambers unsteadily down from the top deck. He's a tall, emaciated-looking man, wearing a red thermal suit three sizes too big for him: salt-and-pepper stubble textures his jaw with sandpaper. Right now, he looks like a cholera victim; sallow skin, smell of acrid ketones as his body eats its own protein reserves, a more revolting miasma hovering over him. There's a slim aluminium briefcase chained to his left wrist, a bracelet of bruises darkening the skin above it. Roger steps forward.

“Sir?" Gorman straightens up for a moment: almost a shadow of military attention. He's unable to sustain it. ”We made the pickup. Here's the QA sample; the rest is down below. You have the unlocking code?" he asks wearily.

Jourgensen nods. "One. Five. Eight. One. Two. Two. Nine."

Gorman slowly dials it into a combination lock on the briefcase, lets it fall open and unthreads the chain from his wrist. Floodlights glisten on polythene bags stuffed with white powder, five kilos of high-grade heroin from the hills of Afghanistan; there's another quarter of a ton packed in boxes in the crew compartment. The lieutenant inspects it, closes the case and passes it to Jourgensen. "Delivery successful, sir." From the ruins on the high plateau of the Taklamakan desert to American territory in Antarctica, by way of a detour through gates linking alien worlds: gates that nobody knows how to create or destroy except the Predecessors — and they aren't talking.

“What's it like through there?" Roger demands, shoulders tense. ”What did you see?"

Up on top, Suslowicz is sitting in the sub's hatch, half slumping against the crane's attachment post. There's obviously something very wrong with him. Gorman shakes his head and looks away: the wan light makes the razor-sharp creases on his face stand out, like the crackled and shattered surface of a Jovian moon. Crow's feet. Wrinkles. Signs of age. Hair the colour of moonlight. “It took so long," he says, almost complaining. Sinks to his knees. ”All that time we've been gone ..." He leans against the side of the sub, a pale shadow, aged beyond his years. "The sun was so bright. And our radiation detectors. Must have been a solar flare or something." He doubles over and retches at the edge of the platform.

Roger looks at him for a long, thoughtful minute: Gorman is twenty-five and a fixer for Big Black, early history in the Green Berets. He was in rude good health two days ago, when he set off through the gate to make the pick-up. Roger glances at the lieutenant. “I'd better go and tell the colonel," he says. A pause. ”Get these two back to Recovery and see they're looked after. I don't expect we'll be sending any more crews through Victor-Tango for a while."

He turns and walks towards the lift shaft, hands clasped behind his back to keep them from shaking. Behind him, alien moonlight glimmers across the floor of Lake Vostok, three miles and untold light years from home.

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General LeMay would be Proud

Warning

The following briefing film is classified SECRET INDIGO MARCH SNIPE. If you do not have SECRET INDIGO MARCH SNIPE clearance, leave the auditorium now and report to your unit security officer for debriefing. Failing to observe this notice is an imprisonable offense.

You have sixty seconds to comply.

Video clip

Shot of huge bomber, rounded gun turrets sprouting like mushrooms from the decaying log of its fuselage, weirdly bulbous engine pods slung too far out towards each wingtip, four turbine tubes clumped around each atomic kernel.

Voice-over

"The Convair B-39 Peacemaker is the most formidable weapon in our Strategic Air Command's arsenal for peace. Powered by eight nuclear-heated Pratt and Whitney NP-4051 turbojets, it circles endlessly above the Arctic ice cap, waiting for the call. This is Item One, the flight training and test bird: twelve other birds await criticality on the ground, for once launched a B-39 can only be landed at two airfields in Alaska that are equipped to handle them. This one's been airborne for nine months so far, and shows no signs of age."

Cut to:

A shark the size of a Boeing 727 falls away from the open bomb bay of the monster. Stubby delta wings slice through the air, propelled by a rocket-bright glare.

Voice-over

"A modified Navajo missile — test article for an XK-PLUTO payload — dives away from a carrier plane. Unlike the real thing, this one carries no hydrogen bombs, no direct-cycle fission ramjet to bring retaliatory destruction to the enemy. Travelling at Mach 3 the XK-PLUTO will overfly enemy territory, dropping megaton-range bombs until, its payload exhausted, it seeks out and circles a final enemy. Once over the target it will eject its reactor core and rain molten plutonium on the heads of the enemy. XK-PLUTO is a total weapon: every aspect of its design, from the shockwave it creates as it hurtles along at treetop height to the structure of its atomic reactor, is designed to inflict damage."

Cut to:

Belsen postcards, Auschwitz movies: a holiday in hell.

Voice-over

"This is why we need such a weapon. This is what it deters. The abominations first raised by the Third Reich's Organisation Todt, now removed to the Ukraine and deployed in the service of New Soviet Man as our enemy calls himself."

Cut to:

A sinister grey concrete slab, the upper surface of a Mayan step pyramid built with East German cement. Barbed wire, guns. A drained canal slashes north from the base of the pyramid towards the Baltic coastline, relic of the installation process: this is where it came from. The slave barracks squat beside the pyramid like a horrible memorial to its black-uniformed builders.

Cut to:

The new resting place: a big concrete monolith surrounded by three concrete lined lakes and a canal. It sits in the midst of a Ukraine landscape, flat as a pancake, stretching out forever in all directions.

Voice-over

"This is Project Koschei. The Kremlin's key to the gates of hell ..."

* * * *

Technology taster

"We know they first came here during the Precambrian age."

Professor Gould is busy with his viewgraphs, eyes down, trying not to pay too much attention to his audience. “We have samples of macrofauna, discovered by palaeontologist Charles D. Walcott on his pioneering expeditions into the Canadian Rockies, near the eastern border of British Columbia —" a hand-drawing of something indescribably weird fetches up on the screen ” — like this opabina, which died there six hundred and forty million years ago. Fossils of soft-bodied animals that old are rare; the Burgess shale deposits are the best record of the Precambrian fauna anyone has found to date."

A skinny woman with big hair and bigger shoulder-pads sniffs loudly; she has no truck with these antediluvian dates. Roger winces sympathy for the academic. He'd rather she wasn't here, but somehow she got wind of the famous palaeontologist's visit — and she's the colonel's administrative assistant. Telling her to leave would be a career-limiting move.

“The important item to note — " photograph of a mangled piece of rock, visual echoes of the opabina — ”is the tooth marks. We find them also — their exact cognates — on the ring segments of the Z-series specimens

returned by the Pabodie Antarctic expedition of 1926. The world of the Precambrian was laid out differently from our own; most of the land masses that today are separate continents were joined into one huge structure. Indeed, these samples were originally separated by only two thousand miles or thereabouts. Suggesting that they brought their own parasites with them."

"What do tooth-marks tell us about them, that we need to know?" asks the colonel.

The doctor looks up. His eyes gleam: “That something liked to eat them when they were fresh." There's a brief rattle of laughter. ”Something with jaws that open and close like the iris in your camera. Something we thought was extinct."

Another viewgraph, this time with a blurry underwater photograph on it. The thing looks a bit like a weird fish — a turbocharged, armoured hagfish with side-skirts and spoilers, or maybe a squid with not enough tentacles. The upper head is a flattened disk, fronted by two bizarre fern-like tentacles drooping over the weird sucker-mouth on its underside. “This snapshot was taken in Lake Vostok last year. It should be dead: there's nothing there for it to eat. This, ladies and gentlemen, is Anomalocaris, our toothy chewer." He pauses for a moment. ”I'm very grateful to you for showing it to me," he adds, "even though it's going to make a lot of my colleagues very angry."

Is that a shy grin? The professor moves on rapidly, not giving Roger a chance to fathom his real reaction. "Now this is interesting in the extreme," Gould comments. Whatever it is, it looks like a cauliflower head, or maybe a brain: fractally branching stalks continuously diminishing in length and diameter, until they turn into an iridescent fuzzy manifold wrapped around a central stem. The base of the stem is rooted to a barrel-shaped structure that stands on four stubby tentacles.

“We had somehow managed to cram Anomalocaris into our taxonomy, but this is something that has no precedent. It bears a striking resemblance to an enlarged body segment of Hallucigena —" here he shows another viewgraph, something like a stiletto-heeled centipede wearing a war-bonnet of tentacles — ”but a year ago we worked out that we had poor hallucigena upside down and it was actually just a spiny worm. And the high levels of iridium and diamond in the head here ... this isn't a living creature, at least not within the animal kingdom I've been studying for the past thirty years. There's no cellular structure at all. I asked one of my colleagues for help

and they were completely unable to isolate any DNA or RNA from it at all. It's more like a machine that displays biological levels of complexity."

"Can you put a date to it?" asks the colonel.

“Yup." The professor grins. ”It predates the wave of atmospheric atomic testing that began in 1945; that's about all. We think it's from some time in the first half of this century, last half of last century. It's been dead for years, but there are older people still walking this earth. In contrast —" he flips to the picture of Anomalocaris “— this specimen we found in rocks that are roughly six hundred and ten million years old." He whips up another shot: similar structure, much clearer. ”Note how similar it is to the dead but not decomposed one. They're obviously still alive somewhere."

He looks at the colonel, suddenly bashful and tongue-tied: "Can I talk about the, uh, thing we were, like, earlier ...?"

"Sure. Go ahead. Everyone here is cleared for it." The colonel's casual wave takes in the big-haired secretary, and Roger, and the two guys from Big Black who are taking notes, and the very serious woman from the Secret Service, and even the balding, worried-looking Admiral with the double chin and coke-bottle glasses.

“Oh. Alright." Bashfulness falls away. ”Well, we've done some preliminary dissections on the Anomalocaris tissues you supplied us with. And we've sent some samples for laboratory analysis — nothing anyone could deduce much from," he adds hastily. He straightens up. "What we discovered is quite simple: these samples didn't originate in Earth's ecosystem. Cladistic analysis of their intracellular characteristics and what we've been able to work out of their biochemistry indicates, not a point of divergence from our own ancestry, but the absence of common ancestry. A cabbage is more human, has more in common with us, than that creature. You can't tell by looking at the fossils, six hundred million years after it died, but live tissue samples are something else.

“Item: it's a multicellular organism, but each cell appears to have multiple structures like nuclei — a thing called a syncitium. No DNA, it uses RNA with a couple of base pairs that aren't used by terrestrial biology. We haven't been able to figure out what most of its organelles do, what their terrestrial cognates would be, and it builds proteins using a couple of amino acids that we don't. That nothing does. Either it's descended from an ancestry that diverged from ours before the archaeobacteria, or — more

probably — it is no relative at all." He isn't smiling any more. ”The gateways, colonel?"

"Yeah, that's about the size of it. The critter you've got there was retrieved by one of our, uh, missions. On the other side of a gate."

Gould nods. "I don't suppose you could get me some more?" he asks hopefully.

"All missions are suspended pending an investigation into an accident we had earlier this year," the colonel says, with a significant glance at Roger. Suslowicz died two weeks ago; Gorman is still disastrously sick, connective tissue rotting in his body, massive radiation exposure the probable cause. Normal service will not be resumed; the pipeline will remain empty until someone can figure out a way to make the deliveries without losing the crew. Roger inclines his head minutely.

“Oh well." The professor shrugs. ”Let me know if you do. By the way, do you have anything approximating a fix on the other end of the gate?"

“No," says the colonel, and this time Roger knows he's lying. Mission four, before the colonel diverted their payload capacity to another purpose, planted a compact radio telescope in an empty courtyard in the city on the far side of the gate. XK-Masada, where the air's too thin to breathe without oxygen; where the sky is indigo, and the buildings cast razor-sharp shadows across a rocky plain baked to the consistency of pottery under a blood-red sun. Subsequent analysis of pulsar signals recorded by the station confirmed that it was nearly six hundred light years closer to the galactic core, inward along the same spiral arm. There are glyphs on the alien buildings that resemble symbols seen in grainy black-and-white Minox photos of the doors of the bunker in the Ukraine. Symbols behind which the subject of Project Koschei lies undead and sleeping: something evil, scraped from a nest in the drowned wreckage of a city on the Baltic floor. ”Why do you want to know where they came from?"

“Well. We know so little about the context in which life evolves." For a moment the professor looks wistful. ”We have — had — only one datum point: Earth, this world. Now we have a second, a fragment of a second. If we get a third, we can begin to ask deep questions like, not, 'is there life out there?' — because we know the answer to that one, now — but questions like 'what sort of life is out there?' and 'is there a place for us?'"

Roger shudders: idiot, he thinks. If only you knew you wouldn't be so happy — He restrains the urge to speak up. Doing so would be another

career-limiting move. More to the point, it might be a life-expectancy-limiting move for the professor, who certainly didn't deserve any such drastic punishment for his cooperation. Besides, Harvard professors visiting the Executive Office Building in DC are harder to disappear than comm-symp teachers in some fly-blown jungle village in Nicaragua. Somebody might notice. The colonel would be annoyed.

Roger realises that Professor Gould is staring at him. "Do you have a question for me?" asks the distinguished palaeontologist.

“Uh — in a moment." Roger shakes himself. Remembering time-survivor curves, the captured Nazi medical atrocity records mapping the ability of a human brain to survive in close proximity to the Baltic Singularity. Mengele's insanity. The SS's final attempt to liquidate the survivors, the witnesses. Koschei, primed and pointed at the American heartland like a darkly evil gun. The ”world-eating mind" adrift in brilliant dreams of madness, estivating in the absence of its prey: dreaming of the minds of sapient beings, be they barrel-bodied wing-flying tentacular things, or their human inheritors. "Do you think they could have been intelligent, professor? Conscious, like us?"

“I'd say so." Gould's eyes glitter. ”This one —" he points to a viewgraph — “isn't alive as we know it. And this one — " he's found a Predecessor, god help him, barrel-bodied and bat-winged — ”had what looks like a lot of very complex ganglia, not a brain as we know it, but at least as massive as our own. And some specialised grasping adaptations that might be interpreted as facilitating tool use. Put the two together and you have a high level technological civilization. Gateways between planets orbiting different stars. Alien flora, fauna, or whatever. I'd say an interstellar civilization isn't out of the picture. One that has been extinct for deep geological time — ten times as long as the dinosaurs — but that has left relics that work." His voice is trembling with emotion. "We humans, we've barely scratched the surface! The longest lasting of our relics? All our buildings will be dust in twenty thousand years, even the pyramids. Neil Armstrong's footprints in the Sea of Tranquillity will crumble under micrometeoroid bombardment in a mere half million years or so. The emptied oil fields will refill over ten million years, methane percolating up through the mantle: continental drift will erase everything. But these people...! They built to last. There's so much to learn from them. I wonder if we're worthy pretenders to their technological crown?"

“I'm sure we are, professor," the colonel's secretary says brassily. ”Isn't that right, Ollie?"

The colonel nods, grinning. "You betcha, Fawn. You betcha!"

* * * *

The Great Satan

Roger sits in the bar in the King David hotel, drinking from a tall glass of second-rate lemonade and sweating in spite of the air conditioning. He's dizzy and disoriented from jet-lag, the gut-cramps have only let him come down from his room in the past hour, and he has another two hours to go before he can try to place a call to Andrea. They had another blazing row before he flew out here; she doesn't understand why he keeps having to visit odd corners of the globe. She only knows that his son is growing up thinking a father is a voice that phones at odd times of day.

Roger is mildly depressed, despite the buzz of doing business at this level. He spends a lot of time worrying about what will happen if they're found out — what Andrea will do, or Jason for that matter, Jason whose father is a phone call away all the time — if Roger is led away in handcuffs beneath the glare of flash bulbs. If the colonel sings, if the shy bald admiral is browbeaten into spilling the beans to Congress, who will look after them then?

Roger has no illusions about what kills black operations: there are too many people in the loop, too many elaborate front corporations and numbered bank accounts and shady Middle Eastern arms dealers. Sooner or later someone will find a reason to talk, and Roger is in too deep. He isn't just the company liaison officer any more: he's become the colonel's bag-man, his shadow, the guy with the diplomatic passport and the bulging briefcase full of heroin and end-user certificates.

At least the ship will sink from the top down, he thinks. There are people very high up who want the colonel to succeed. When the shit hits the fan and is sprayed across the front page of the Washington Post, it will likely take down cabinet members and secretaries of state: the President himself will have to take the witness stand and deny everything. The republic will question itself.

A hand descends on his shoulder, sharply cutting off his reverie. "Howdy, Roger! Whatcha worrying about now?"

Jourgensen looks up wearily. “Stuff," he says gloomily. ”Have a seat." The redneck from the embassy — Mike Hamilton, some kind of junior attache for embassy protocol by cover — pulls out a chair and crashes down on it like a friendly car wreck. He's not really a redneck, Roger knows — rednecks don't come with doctorates in foreign relations from Yale — but he likes people to think he's a bumpkin when he wants to get something from them.

“He's early," says Hamilton, looking past Roger's ear, voice suddenly all business. ”Play the agenda, I'm your dim but friendly good cop. Got the background? Deniables ready?"

Roger nods, then glances round and sees Mehmet (family name unknown) approaching from the other side of the room. Mehmet is impeccably manicured and tailored, wearing a suit from Jermyn Street that costs more than Roger earns in a month. He has a neatly trimmed beard and moustache and talks with a pronounced English accent. Mehmet is a Turkish name, not a Persian one: pseudonym, of course. To look at him you would think he was a westernized Turkish businessman — certainly not an Iranian revolutionary with heavy links to Hezbollah and (whisper this), Old Man Ruholla himself, the hermit of Qom. Never, ever, in a thousand years, the unofficial Iranian ambassador to the Little Satan in Tel Aviv.

Mehmet strides over. A brief exchange of pleasantries masks the essential formality of their meeting: he's early, a deliberate move to put them off-balance. He's outnumbered, too, and that's also a move to put them on the defensive, because the first rule of diplomacy is never to put yourself in a negotiating situation where the other side can assert any kind of moral authority, and sheer weight of numbers is a powerful psychological tool.

“Roger, my dear fellow." He smiles at Jourgensen. ”And the charming doctor Hamilton, I see." The smile broadens. "I take it the good colonel is desirous of news of his friends?"

Jourgensen nods. "That is indeed the case."

Mehmet stops smiling. For a moment he looks ten years older. “I visited them," he says shortly. ”No, I was taken to see them. It is indeed grave, my friends. They are in the hands of very dangerous men, men who have nothing to lose and are filled with hatred."

Roger speaks: "There is a debt between us —"

Mehmet holds up a hand. "Peace, my friend. We will come to that. These are men of violence, men who have seen their homes destroyed and

families subjected to indignities, and their hearts are full of anger. It will take a large display of repentance, a high blood-price, to buy their acquiescence. That is part of our law, you understand? The family of the bereaved may demand blood-price of the transgressor, and how else might the world be? They see it in these terms: that you must repent of your evils and assist them in waging holy war against those who would defile the will of Allah."

Roger sighs. “We do what we can," he says. ”We're shipping them arms. We're fighting the Soviets every way we can without provoking the big one. What more do they want? The hostages — that's not playing well in DC. There's got to be some give and take. If Hezbollah don't release them soon they'll just convince everyone what they're not serious about negotiating. And that'll be an end to it. The colonel wants to help you, but he's got to have something to show the man at the top, right?"

Mehmet nods. "You and I are men of the world and understand that this keeping of hostages is not rational, but they look to you for defence against the great Satan that assails them, and their blood burns with anger that your nation, for all its fine words, takes no action. The great Satan rampages in Afghanistan, taking whole villages by night, and what is done? The United States turns its back. And they are not the only ones who feel betrayed. Our Ba'athist foes from Iraq ... in Basra the unholy brotherhood of Takrit and their servants the Mukhabarat hold nightly sacrifice upon the altar of Yair-Suthot; the fountains of blood in Tehran testify to their effect. If the richest, most powerful nation on earth refuses to fight, these men of violence from the Bekaa think, how may we unstopper the ears of that nation? And they are not sophisticates like you or I."

He looks at Roger, who hunches his shoulders uneasily. "We can't move against the Soviets openly! They must understand that it would be the end of far more than their little war. If the Taliban want American help against the Russians, it cannot be delivered openly."

“It is not the Russians that we quarrel with," Mehmet says quietly, ”but their choice in allies. They believe themselves to be infidel atheists, but by their deeds they shall be known; the icy spoor of Leng is upon them, their tools are those described in the Kitab al Azif. We have proof that they have violated the terms of the Dresden Agreement. The accursed and unhallowed stalk the frozen passes of the Himalayas by night, taking all whose path they cross. And will you stopper your ears even as the Russians grow in

misplaced confidence, sure that their dominance of these forces of evil is complete? The gates are opening everywhere, as it was prophesied. Last week we flew an F-14C with a camera relay pod through one of them. The pilot and weapons operator are in paradise now, but we have glanced into hell and have the film and radar plots to prove it."

The Iranian ambassador fixes the redneck from the embassy with an icy gaze. "Tell your ambassador that we have opened preliminary discussions with Mossad, with a view to purchasing the produce of a factory at Dimona, in the Negev desert. Past insults may be set aside, for the present danger imperils all of us. They are receptive to our arguments, even if you are not: his holiness the Ayatollah has declared in private that any warrior who carries a nuclear device into the abode of the eater of souls will certainly achieve paradise. There will be an end to the followers of the ancient abominations on this Earth, doctor Hamilton, even if we have to push the nuclear bombs down their throats with our own hands!"

* * * *

Swimming pool

"Mister Jourgensen, at what point did you become aware that the Iranian government was threatening to violate UN Resolution 216 and the Non-Proliferation Protocol to the 1956 Geneva accords?"

Roger sweats under the hot lights: his heartbeat accelerates. "I'm not sure I understand the question, sir."

"I asked you a direct question. Which part don't you understand? I'm going to repeat myself slowly: when did you realise that the Iranian Government was threatening to violate resolution 216 and the 1956 Geneva Accords on nuclear proliferation?"

Roger shakes his head. It's like a bad dream, unseen insects buzzing furiously around him. "Sir, I had no direct dealings with the Iranian government. All I know is that I was asked to carry messages to and from a guy called Mehmet who I was told knew something about our hostages in Beirut. My understanding is that the colonel has been conducting secret negotiations with this gentleman or his backers for some time — a couple of years — now. Mehmet made allusions to parties in the Iranian administration but I have no way of knowing if he was telling the truth, and I never saw any diplomatic credentials."

There's an inquisition of dark-suited congressmen opposite him, like a jury of teachers sitting in judgement over an errant pupil. The trouble is, these teachers can put him in front of a judge and send him to prison for many years, so that Jason really will grow up with a father who's a voice on the telephone, a father who isn't around to take him to air shows or ball games or any of the other rituals of growing up. They're talking to each other quietly, deciding on another line of questioning: Roger shifts uneasily in his chair. This is a closed hearing, the television camera a gesture in the direction of the congressional archives: a pack of hungry democrats have scented republican blood in the water.

The congressman in the middle looks towards Roger. "Stop right there. Where did you know about this guy Mehmet from? Who told you to go see him and who told you what he was?"

Roger swallows. “I got a memo from Fawn, like always. Admiral Poindexter wanted a man on the spot to talk to this guy, a messenger, basically, who was already in the loop. Colonel North signed off on it and told me to charge the trip to his discretionary fund." That must have been the wrong thing to say, because two of the congressmen are leaning together and whispering in each other's ears, and an aide obligingly sidles up to accept a note, then dashes away. ”I was told that Mehmet was a mediator," Roger adds. "In trying to resolve the Beirut hostage thing."

"A mediator." The guy asking the questions looks at him in disbelief.

The man to his left — who looks as old as the moon, thin white hair, liver spots on his hooked nose, eyelids like sacks — chuckles appreciatively. “Yeah. Like Hitler was a diplomat. 'One more territorial demand' —" he glances round. ”Nobody else remember that?" he asks plaintively.

"No sir," Roger says very seriously.

The prime interrogator snorts. "What did Mehmet tell you Iran was going to do, exactly?"

Roger thinks for a moment. "He said they were going to buy something from a factory at Dimona. I understood this to be the Israeli Defence Ministry's nuclear weapons research institute, and the only logical item — in the context of our discussion — was a nuclear weapon. Or weapons. He said the Ayatollah had decreed that a suicide bomber who took out the temple of Yog-Sothoth in Basra would achieve paradise, and that they also had hard evidence that the Soviets have deployed certain illegal weapons

systems in Afghanistan. This was in the context of discussing illegal weapons proliferation; he was very insistent about the Iraq thing."

"What exactly are these weapons systems?" demands the third inquisitor, a quiet, hawk-faced man sitting on the left of the panel.

"The shoggot'im, they're called: servitors. There are several kinds of advanced robotic systems made out of molecular components: they can change shape, restructure material at the atomic level — act like corrosive acid, or secrete diamonds. Some of them are like a tenuous mist — what Doctor Drexler at MIT calls a utility fog — while others are more like an oily globule. Apparently they may be able to manufacture more of themselves, but they're not really alive in any meaning of the term we're familiar with. They're programmable, like robots, using a command language deduced from recovered records of the forerunners who left them here. The Molotov Raid of 1930 brought back a large consignment of them; all we have to go on are the scraps they missed, and reports by the Antarctic Survey. Professor Liebkunst's files in particular are most frustrating —"

"Stop. So you're saying the Russians have these, uh, Shoggoths, but we don't have any. And even those dumb Arab bastards in Baghdad are working on them. So you're saying we've got a, a Shoggoth gap? A strategic chink in our armour? And now the Iranians say the Russians are using them in Afghanistan?"

Roger speaks rapidly: “That is minimally correct, sir, although countervailing weapons have been developed to reduce the risk of a unilateral preemption escalating to an exchange of weakly godlike agencies." The congressman in the middle nods encouragingly. ”For the past three decades, the B-39 Peacemaker force has been tasked by SIOP with maintaining an XK-PLUTO capability directed at ablating the ability of the Russians to activate Project Koschei, the dormant alien entity they captured from the Nazis at the end of the last war. We have twelve PLUTO-class atomic-powered cruise missiles pointed at that thing, day and night, as many megatons as the entire Minuteman force. In principle, we will be able to blast it to pieces before it can be brought to full wakefulness and eat the minds of everyone within two hundred miles."

He warms to his subject. "Secondly, we believe the Soviet control of Shoggoth technology is rudimentary at best. They know how to tell them to roll over an Afghan hill-farmer village, but they can't manufacture more of them. Their utility as weapons is limited — but terrifying — but they're not

much of a problem. A greater issue is the temple in Basra. This contains an operational gateway, and according to Mehmet the Iraqi political secret police, the Mukhabarat, are trying to figure out how to manipulate it; they're trying to summon something through it. He seemed to be mostly afraid that they — and the Russians — would lose control of whatever it was; presumably another weakly godlike creature like the K-Thulu entity at the core of Project Koschei."

The old guy speaks: "This foo-loo thing, boy — you can drop those stupid K prefixes around me — is it one of a kind?"

Roger shakes his head. "I don't know, sir. We know the gateways link to at least three other planets. There may be many that we don't know of. We don't know how to create them or close them; all we can do is send people through, or pile bricks in the opening." He nearly bites his tongue, because there are more than three worlds out there, and he's been to at least one of them: the bolt-hole on XK-Masada, built by the NRO from their secret budget. He's seen the mile-high dome Buckminster Fuller spent his last decade designing for them, the rings of Patriot air defence missiles. A squadron of black diamond-shaped fighters from the Skunk works, said to be invisible to radar, patrols the empty skies of XK-Masada. Hydroponic farms and empty barracks and apartment blocks await the senators and congressmen and their families and thousands of support personnel. In event of war they'll be evacuated through the small gate that has been moved to the Executive Office Building basement, in a room beneath the swimming pool where Jack used to go skinny-dipping with Marilyn.

“Off the record now." The old congressman waves his hand in a chopping gesture: ”I say off, boy." The cameraman switches off his machine and leaves. He leans forward, towards Roger. "What you're telling me is, we've been waging a secret war since, when? The end of the second world war? Earlier, the Pabodie Antarctic expedition in the twenties, whose survivors brought back the first of these alien relics? And now the Eye-ranians have gotten into the game and figure it's part of their fight with Saddam?"

"Sir." Roger barely trusts himself to do more than nod.

“Well." The congressman eyes his neighbour sharply. ”Let me put it to you that you have heard the phrase, 'the great filter'. What does it mean to you?"

“The great —" Roger stops. Professor Gould, he thinks. ”We had a professor of palaeontology lecture us," he explains. "I think he mentioned it. Something about why there aren't any aliens in flying saucers buzzing us the whole time."

The congressman snorts. His neighbour starts and sits up. "Thanks to Pabodie and his followers, Liebkunst and the like, we know there's a lot of life in the universe. The great filter, boy, is whatever force stops most of it developing intelligence and coming to visit. Something, somehow, kills intelligent species before they develop this kind of technology for themselves. How about meddling with relics of the elder ones? What do you think of that?"

Roger licks his lips nervously. "That sounds like a good possibility, sir," he says. His unease is building.

The congressman's expression is intense: "These weapons your colonel is dicking around with make all our nukes look like a toy bow and arrow, and all you can say is it's a good possibility, sir? Seems to me like someone in the Oval Office has been asleep at the switch."

"Sir, executive order 2047, issued January 1980, directed the armed forces to standardize on nuclear weapons to fill the mass destruction role. All other items were to be developmentally suspended, with surplus stocks allocated to the supervision of Admiral Poindexter's joint munitions expenditure committee. Which Colonel North was detached to by the USMC high command, with the full cognizance of the White House —"

The door opens. The congressman looks round angrily: "I thought I said we weren't to be disturbed!"

The aide standing there looks uncertain. "Sir, there's been an, uh, major security incident, and we need to evacuate —"

"Where? What happened?" demands the congressman. But Roger, with a sinking feeling, realises that the aide isn't watching the house committee members: and the guy behind him is Secret Service.

“Basra. There's been an attack, sir." A furtive glance at Roger, as his brain freezes in denial: ”If you'd all please come this way ..."

* * * *

Bombing in fifteen minutes

Heads down, through a corridor where congressional staffers hurry about carrying papers, urgently calling one another. A cadre of dark-suited

secret service agents close in, hustling Roger along in the wake of the committee members. A wailing like tinnitus fills his ears. "What's happening?" he asks, but nobody answers.

Down into the basement. Another corridor, where two marine guards are waiting with drawn weapons. The secret service guys are exchanging terse reports by radio. The committee men are hustled away along a narrow service tunnel: Roger is stalled by the entrance. "What's going on?" he asks his minder.

“Just a moment, sir." More listening: these guys cock their heads to one side as they take instruction, birds of prey scanning the horizon for prey. ”Delta four coming in. Over. You're clear to go along the tunnel now, sir. This way."

"What's happening?" Roger demands as he lets himself be hustled into the corridor, along to the end and round a sharp corner. Numb shock takes hold: he keeps putting one foot in front of the other.

"We're now at Defcon one, sir. You're down on the special list as part of the house staff. Next door on the left, sir."

The queue in the dim-lit basement room is moving fast, white-gloved guards with clipboards checking off men and a few women in suits as they step through a steel blast door one by one and disappear from view. Roger looks round in bewilderment: he sees a familiar face. "Fawn! What's going on?"

The secretary looks puzzled. "I don't know. Roger? I thought you were testifying today."

“So did I." They're at the door. ”What else?"

"Ronnie was making a big speech in Helsinki; the colonel had me record it in his office. Something about not coexisting with the empire of evil. He cracked some kinda joke about how we start bombing in fifteen minutes, then this —"

They're at the door. It opens on a steel-walled airlock and the marine guard is taking their badges and hustling them inside. Two staff types and a middle-aged brigadier join them and the door thumps shut. The background noise vanishes, Roger's ears pop, then the inner door opens and another marine guard waves them through into the receiving hall.

"Where are we?" asks the big-haired secretary, staring around.

"Welcome to XK-Masada," says Roger. Then his childhood horrors catch up with him and he goes in search of a toilet to throw up in.

* * * *

We need you back

Roger spends the next week in a state of numbed shock. His apartment here is like a small hotel room — a hotel with security, air conditioning, and windows that only open onto an interior atrium. He pays little attention to his surroundings. It's not as if he has a home to return to.

Roger stops shaving. Stops changing his socks. Stops looking in mirrors or combing his hair. He smokes a lot, orders cheap bourbon from the commissary, and drinks himself into an amnesic stupor each night. He is, frankly, a mess. Self-destructive. Everything disintegrated under him at once: his job, the people he held in high regard, his family, his life. All the time he can't get one thing out of his head: the expression on Gorman's face as he stands there, in front of the submarine, rotting from the inside out with radiation sickness, dead and not yet knowing it. It's why he's stopped looking in mirrors.

On the fourth day he's slumped in a chair watching taped I Love Lucy re-runs on the boob tube when the door to his suite opens quietly. Someone comes in. He doesn't look round until the colonel walks across the screen and unplugs the TV set at the wall, then sits down in the chair next to him. The colonel has bags of dark skin under his eyes; his jacket is rumpled and his collar is unbuttoned.

“You've got to stop this, Roger," he says quietly. ”You look like shit."

"Yeah, well. You too."

The colonel passes him a slim manila folder. Without wanting to, Roger slides out the single sheet of paper within.

"So it was them."

“Yeah." A moment's silence. ”For what it's worth, we haven't lost yet. We may yet pull your wife and son out alive. Or be able to go back home."

“Your family too, I suppose." Roger's touched by the colonel's consideration, the pious hope that Andrea and Jason will be alright, even through his shell of misery. He realises his glass is empty. Instead of re-filling it he puts it down on the carpet beside his feet. ”Why?"

The colonel removes the sheet of paper from his numb fingers. “Probably someone spotted you in the King David and traced you back to us. The Mukhabarat had agents everywhere, and if they were in league with the KGB ..." he shrugs. ”Things escalated rapidly. Then the president

cracked that joke over a hot mike that was supposed to be switched off ... Have you been checking in with the desk summaries this week?"

Roger looks at him blankly. "Should I?"

“Oh, things are still happening." The colonel leans back and stretches his feet out. ”From what we can tell of the situation on the other side, not everyone's dead yet. Ligachev's screaming blue murder over the hotline, accusing us of genocide: but he's still talking. Europe is a mess and nobody knows what's going on in the Middle East — even the Blackbirds aren't making it back out again."

"The thing at Takrit."

"Yeah. It's bad news, Roger. We need you back."

"Bad news?"

“The worst." The colonel jams his hands between his knees, stares at the floor like a bashful child. ”Saddam Hussein al-Takriti spent years trying to get his hands on elder technology. It looks like he finally succeeded in stabilising the gate into Sothoth. Whole villages disappeared, Marsh Arabs, wiped out in the swamps of Eastern Iraq. Reports of yellow rain, people's skin melting right off their bones. The Iranians got itchy and finally went nuclear. Trouble is, they did so two hours before that speech. Some asshole in Plotsk launched half the Uralskoye SS-20 grid — they went to launch on warning eight months ago — burning south, praise Jesus. Scratch the Middle East, period — everything from the Nile to the Khyber Pass is toast. We're still waiting for the callback on Moscow, but SAC has put the whole Peacemaker force on airborne alert. So far we've lost the eastern seaboard as far south as North Virginia and they've lost the Donbass basin and Vladivostok. Things are a mess; nobody can even agree whether we're fighting the commies or something else. But the box at Chernobyl — Project Koschei — the doors are open, Roger. We orbited a Keyhole-eleven over it and there are tracks, leading west. The PLUTO strike didn't stop it — and nobody knows what the fuck is going on in WarPac country. Or France, or Germany, or Japan, or England."

The colonel makes a grab for Roger's wild turkey, rubs the neck clean and swallows from the bottle. He looks at Roger with a wild expression on his face. "Koschei is loose, Roger. They fucking woke the thing. And now they can't control it. Can you believe that?"

"I can believe that."

"I want you back behind a desk tomorrow morning, Roger. We need to know what this Thulu creature is capable of. We need to know what to do to stop it. Forget Iraq; Iraq is a smoking hole in the map. But K-Thulu is heading towards the Atlantic coast. What are we going to do if it doesn't stop?"

* * * *

Masada

The city of XK-Masada sprouts like a vast mushroom, a mile-wide dome emerging from the top of a cold plateau on a dry planet that orbits a dying star. The jagged black shapes of F-117's howl across the empty skies outside it at dusk and dawn, patrolling the threatening emptiness that stretches as far as the mind can imagine.

Shadows move in the streets of the city, hollowed out human shells in uniform. They rustle around the feet of the towering concrete blocks like the dry leaves of autumn, obsessively focussed on the tasks that lend structure to their remaining days. Above them tower masts of steel, propping up the huge geodesic dome that arches across the sky: blocking out the hostile, alien constellations, protecting frail humanity from the dust storms that periodically scour the bones of the ancient world. The gravity here is a little lighter, the night sky whorled and marbled by the diaphanous sheets of gas blasted off the dying star that lights their days. During the long winter nights, a flurry of carbon dioxide snow dusts the surface of the dome: but the air is bone-dry, the city slaking its thirst on subterranean aquifers.

This planet was once alive — there is still a scummy sea of algae near the equator that feeds oxygen into the atmosphere, and there is a range of volcanoes near the north pole that speaks of plate tectonics in motion — but it is visibly dying. There is a lot of history here, but no future.

Sometimes, in the early hours when he cannot sleep, Roger walks outside the city, along the edge of the dry plateau. Machines labour on behind him, keeping the city tenuously intact: he pays them little attention. There is talk of mounting an expedition to Earth one of these years, to salvage whatever is left before the searing winds of time erase them forever. Roger doesn't like to think about that. He tries to avoid thinking about Earth as much as possible: except when he cannot sleep but walks along the cliff top, prodding at memories of Andrea and Jason and his parents and sister

and relatives and friends, each of them as painful as the socket of a missing tooth. He has a mouthful of emptiness, bitter and aching, out here on the edge of the plateau.

Sometimes Roger thinks he's the last human being alive. He works in an office, feverishly trying to sort out what went wrong: and bodies move around him, talking, eating in the canteen, sometimes talking to him and waiting as if they expect a dialogue. There are bodies here, men and some women chatting, civilian and some military — but no people. One of the bodies, an army surgeon, told him he's suffering from a common stress disorder, survivor's guilt. This may be so, Roger admits, but it doesn't change anything. Soulless days follow sleepless nights into oblivion, dust trickling over the side of the cliff like sand into the un-dug graves of his family.

A narrow path runs along the side of the plateau, just downhill from the foundations of the city power plant where huge apertures belch air warmed by the radiators of the nuclear reactor. Roger follows the path, gravel and sandy rock crunching under his worn shoes. Foreign stars twinkle overhead, forming unrecognizable patterns that tell him he's far from home. The trail drops away from the top of the plateau, until the city is an unseen shadow looming above and behind his shoulder. To his right is a dizzying panorama, the huge rift valley with its ancient city of the dead stretched out before him. Beyond it rise alien mountains, their peaks as high and airless as the dead volcanoes of Mars.

About half a mile away from the dome, the trail circles an outcrop of rock and takes a downhill switchback turn. Roger stops at the bend and looks out across the desert at his feet. He sits down, leans against the rough cliff face and stretches his legs out across the path, so that his feet dangle over nothingness. Far below him, the dead valley is furrowed with rectangular depressions; once, millions of years ago, they might have been fields, but nothing like that survives to this date. They're just dead, like everyone else on this world. Like Roger.

In his shirt pocket, a crumpled, precious pack of cigarettes. He pulls a white cylinder out with shaking fingers, sniffs at it, then flicks his lighter under it. Scarcity has forced him to cut back: he coughs at the first lungful of stale smoke, a harsh, racking croak. The irony of being saved from lung cancer by a world war is not lost on him.

He blows smoke out, a tenuous trail streaming across the cliff. "Why me?" he asks quietly.

The emptiness takes its time answering. When it does, it speaks with the Colonel's voice. "You know the reason."

“I didn't want to do it," he hears himself saying. ”I didn't want to leave them behind."

The void laughs at him. There are miles of empty air beneath his dangling feet. "You had no choice."

“Yes I did! I didn't have to come here." He pauses. ”I didn't have to do anything," he says quietly, and inhales another lungful of death. "It was all automatic. Maybe it was inevitable."

“— Evitable," echoes the distant horizon. Something dark and angular skims across the stars, like an echo of extinct pterosaurs. Turbofans whirring within its belly, the F117 hunts on: patrolling to keep at bay the ancient evil, unaware that the battle is already lost. ”Your family could still be alive, you know."

He looks up. “They could?" Andrea? Jason? ”Alive?"

The void laughs again, unfriendly: "There is life eternal within the eater of souls. Nobody is ever forgotten or allowed to rest in peace. They populate the simulation spaces of its mind, exploring all the possible alternative endings to their life. There is a fate worse than death, you know."

Roger looks at his cigarette disbelievingly: throws it far out into the night sky above the plain. He watches it fall until its ember is no longer visible. Then he gets up. For a long moment he stands poised on the edge of the cliff nerving himself, and thinking. Then he takes a step back, turns, and slowly makes his way back up the trail towards the redoubt on the plateau. If his analysis of the situation is wrong, at least he is still alive. And if he is right, dying would be no escape.

He wonders why hell is so cold at this time of year.

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